DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

ADMINISTRATION OF INFORMATION TECHNOLOGY AUDIT



FINAL REPORT

OCTOBER 14, 2010

Memorandum

Date:

October 14, 2010

To:

Office of the Commissioner

Attention: Commissioner J. A. Farrow

From:

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

Office of Inspector General

File No.:

010.11731.A13471

Subject:

FINAL 2009 ADMINISTRATION OF INFORMATION TECHNOLOGY

AUDIT

In accordance with the *International Standards for the Professional Practice of Internal Auditing* §2440, issued by the Institute of Internal Auditors, Government Code §13887(a)(2), and the California Highway Patrol (CHP) Audit Charter, I am issuing the 2009 Administration of Information Technology audit. The audit focused on the administrative requirements from the State Administration Manual for information technology operations within Information Management Division (IMD) of the CHP.

The audit revealed IMD has adequate operations. However, some issues were observed. This report presents suggestions for management to improve on some operations. In doing so, operations would be strengthened and IMD would ensure it is operating in compliance with all policies and procedures. We have included our specific findings, recommendations, and other pertinent information in the report. IMD agreed with two of the findings and plans to take corrective action to improve operations. However, IMD disagreed with one finding related to obtaining a contract or interagency agreement with the Office of the State Chief Information Officer. Based on the information provided, the finding will remain as written.

IMD will be required to provide a 30 day, 60 day, six month, and one year response for corrective action plan implementation. If identified issues are resolved and addressed during any phase of the above reporting period, no future action is required on their behalf. The Office of Inspector General (OIG) anticipates conducting a follow-up review within one year from the date of the final report.

Additionally, in accordance with the *International Standards for the Professional Practice of Internal Auditing* and Government Code §13887(a)(2), this report, the response, and any follow-up documentation is intended for the Office of the Commissioner; Assistant Commissioner, Staff; OIG; Office of Legal Affairs; and IMD. Please note this report restriction is not meant to limit

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distribution of the report, which is a matter of public record pursuant to Government Code §6250 et seq.

In accordance with the Governor's Executive Order S-20-09 to increase government transparency, the final audit report, including the response to the draft audit report, will be posted on the internet website of the CHP, and on the Office of the Governor's webpage, located on the state government website. The OIG would like to thank management and staff of IMD for their cooperation during the audit.

If you have any questions, or are in need of additional information, please contact me or our Senior Management Auditor, Mr. Roger Ikemoto at (916) 843-3160.

R. J. JONES, Captain Interim Inspector General

cc: Assistant Commissioner, Staff

Information Management Division Office of Legal Affairs

Office of Inspector General, Audits Unit

BUSINESS, TRANSPORTATION AND HOUSING AGENCY DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

ADMINISTRATION OF INFORMATION TECHNOLOGY AUDIT

OFFICE OF INSPECTOR GENERAL, AUDITS UNIT

OCTOBER 14, 2010

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Executive Summary

The Commissioner has the responsibility, by statute, to enforce laws regulating the operation of vehicles and use of highways in the State of California and to provide the highest level of safety, service, and security to the people of California. Consistent with the California Highway Patrol (CHP) 2009 Audit Plan, the Office of the Commissioner directed the Office of Inspector General to perform an audit of the Administration of Information Technology.

The CHP 2008-2010 Strategic Plan highlights the mission statement which includes five broad strategic goals designed to guide the direction of the CHP. One strategic goal is to continuously look for ways to increase the efficiency of departmental operations.

The objective of the audit was to determine if the CHP Administration of Information Technology complied with the State Administrative Manual and departmental policies, and to review the telecommunications property inventory process of the CHP. However, an examination of the information security process was not conducted as part of this audit.

The audit period was from January 1, 2008 through May 31, 2009, and the scope of the audit included compliance with state and departmental policies, and performance of operational procedures. The field audit work, which included both field and headquarters offices, was performed from August 19, 2009 through January 19, 2010.

Based on the review of the CHP's Administration of Information Technology and telecommunications inventory process, this audit revealed the CHP complied with most state laws and operational policies. However, some issues were observed. The following is a summary of the identified issues:

- Information Management Division (IMD) did not submit the 2009 Disaster Recovery Plan of the CHP in a timely manner to the Office of Information Security.
- Telecommunications Section (TS) did not enter into an executed contract or interagency agreement with the Office of the Chief Information Officer (OCIO) clearly stating the telecommunications services, maintenance, and microwave usage the OCIO must provide the CHP to ensure the safety of all departmental employees, especially those on patrol.
- TS did not conduct an annual inventory of all equipment.

Please refer to the Findings and Recommendations section for detailed information.

AUDIT REPORT

INTRODUCTION

To ensure the California Highway Patrol (CHP) operation is efficient and effective and internal controls are in place and operational, the Office of the Commissioner directed the Office of Inspector General (OIG) to perform an audit of the CHP Administration of Information Technology.

The CHP 2008-2010 Strategic Plan highlights the mission statement which includes five broad strategic goals designed to guide the direction of the CHP. One strategic goal is to continuously look for ways to increase the efficiency of departmental operations. This audit will assist the CHP in meeting this goal.

OBJECTIVE AND SCOPE

The objective of the audit was to determine if the CHP has complied with the administrative and operational policies and procedures related to the Administration of Information Technology and to review the telecommunications property inventory process that provided management with reasonable, but not absolute, assurance that departmental information technology (IT) assets are being properly managed. However, an examination of the information security process was not conducted as part of this audit. The audit period was from January 1, 2008 through May 31, 2009. The audit included a review of existing policies, procedures, and practices to determine compliance with established policies, procedures and good business practices. Field audit work, which included both field and headquarters offices, was performed from August 19, 2009 through January 19, 2010.

METHODOLOGY

Under the direction of the Office of Commissioner, the OIG conducted an IT audit of the Administration of Information Technology and telecommunications property inventory process of the CHP. This audit will serve as a foundational starting point for future IT administrative compliance audits.

Prior audit findings related to IT were reported in the 2007 Financial Integrity and State Managers Accountability Act audit as follows:

- "The Department does not address a recovery strategy for the loss of the primary data processing facility.
- The Department lacks documentation on tabletop testing.
- The Department should improve and update the IT Configuration Management.
- The Department improperly secured an IT consulting contract.
- There is no evidence indicating the Department's Information Security Officer (ISO) is directly responsible to the Department's Director (Commissioner).

 It appears the Department's Information Security Officer (ISO) position is not classified correctly."

A subsequent follow-up review of the above findings showed corrective actions had taken place or management has accepted the risk. This Administration of Information Technology audit reports corrective actions are still in place to address the prior findings and management continues to accept the risk associated with the ISO not reporting directly to the Commissioner.

OVERVIEW

Administration of Information Technology: The CHP compiled with most state laws and departmental policies and had adequate internal controls in place for the Administration of Information Technology and telecommunications inventory process of the CHP. However, some issues were discovered. Information Management Division (IMD) did not submit the 2009 Disaster Recovery Plan of the CHP in a timely manner to the Office of Information Security. Additionally, Telecommunications Section (TS) did not enter into an executed contract or interagency agreement with the Office of the Chief Information Officer (OCIO) clearly stating the telecommunications services, maintenance, and microwave usage the OCIO must provide the CHP to ensure the safety of all departmental employees, especially those on patrol. Also, the TS did not conduct an annual inventory of all equipment.

This audit revealed the command has adequate operations, nevertheless issues were discovered, which if left unchecked could have a future negative impact on IMD and CHP operations. These issues should be addressed by management to maintain compliance with appropriate laws, regulations, policies, and procedures. The issues and appropriate recommendations are presented in this report.

As a result of changing conditions and the degree of compliance with policies and procedures, the efficiency and effectiveness of operations change over time. Specific limitations that may hinder the efficiency and effectiveness of an otherwise adequate operation include, but are not limited to, resource constraints, faulty judgments, unintentional errors, circumvention by collusion, fraud, and management overrides. Establishing compliant and safe operations and sound internal controls would prevent or reduce these limitations; however, an audit may not always detect these limitations.

FINDINGS AND RECOMMENDATIONS

FINDING 1:

The Information Management Division (IMD) did not submit the 2009 Disaster Recovery Plan (DRP) of the California Highway Patrol (CHP) in a timely manner to the Office of Information Security (OIS).

Condition:

According to the OIS Agency Disaster Recovery Plan Submission, the CHP DRP was due on April 15, 2009. However, based upon the records from OIS, the CHP DRP was received on August 17, 2009.

After reviewing internal documents provided by IMD, it appears the DRP was completed in a timely manner but was initially sent to another state agency, not to the OIS; hence, causing the CHP DRP to reach the OIS after the posted due date.

Criteria:

State Administrative Manual (SAM) Section 5355.2, item 1. states: "1. Each agency must file a copy of its DRP and the Agency Disaster Recovery Plan Transmittal Letter (SIMM Section 70D) with the Office, in accordance with the Agency Disaster Recovery Plan Submission Schedule."

SAM Section 5360.1, item 2. states: "2. **Disaster Recovery Plan** – Due by the date outlined in the Agency Disaster Recovery Plan Submission Schedule, found on the Office's Web site at www.infosecurity.ca.gov/:

- a. **Disaster Recovery Plan** Each agency must file a copy of its Disaster Recovery Plan (DRP) with the Agency Disaster Recovery Plan Transmittal Letter (SIMM Section 70D) with the Office by the due date outlined in the Agency Disaster Recovery Plan Submission Schedule. If the agency employs the services of a state data center, it must also provide the data center with a copy of its plan or subset of the relevant recovery information from the agency's DRP. See SAM Section 5355.1.
- b. Agency Disaster Recovery Plan Certification An agency Disaster Recovery Plan Certification (SIMM Section 70B) may be filed in place of a full DRP by the due date outlined in the Agency Disaster Recovery Plan Submission Schedule, if specific conditions exist. See SAM Section 5355.1."

Recommendation:

IMD should comply with SAM and file a copy of the CHP DRP in accordance with the OIS Agency Disaster Recovery Plan Submission Schedule.

FINDING 2:

The Telecommunications Section (TS) did not enter into an executed contract or interagency agreement with the Office of the Chief Information Officer (OCIO) clearly stating the telecommunications services, maintenance, and microwave usage the OCIO must provide the CHP to ensure the safety of all departmental employees, especially those on patrol.

Condition:

On May 10, 2009, the Governor's Information Technology Reorganization Plan became effective to consolidate statewide information technology functions under the OCIO. The Department of General Services Telecommunications Division is now the Public Safety Communications Division (PSCD) within the OCIO. The OCIO provides services and maintenance for CHP telecommunications equipment on an ongoing basis. However, there is no contract or interagency agreement between the CHP and the OCIO describing the services, maintenance or microwave usage.

The OCIO sent a generic letter to their "Radio User Agency" along with customized attachments outlining the services provided by the OCIO to specific agency. The letter received by the CHP described the microwave management program, statewide mobile radio equipment installation/removal services, and PSCD service charges. The letter did not address if the OCIO will conduct emergent repairs, but their website articulates this is a service the OCIO will provide. Additionally, since the CHP owns the equipment maintained by the OCIO, the attachments do not describe, nor is there an agreement of, how equipment movement will be documented. Also, this letter does not address an agreed upon protocol describing when the OCIO will place telecommunications equipment out of commission for maintenance or repair. However, the letter clearly articulates the estimated radio and microwave costs to the CHP for fiscal year 2009-2010 as \$33,055,145.00 and fiscal year 2010-2011 as \$27,055,145.00.

Criteria:

State Contracting Manual (SCM), Chapter 1, Introduction, Section 1.04, Agency Responsibilities states: "Each agency is responsible for its own services acquisitions program. This responsibility included ensuring the necessity of the services, securing appropriate funding, complying with laws and policies, writing the contract in a manner that safeguards the state's interest, and obtaining required approvals."

SCM, Chapter 2, The Basic Contracting Process, Section 2.05, Elements of a Valid Contract states: "Each contract must contain the following information:

- Identification of the parties
- Term for the performance or completion of the contract (dates or length of time)
- Consideration (The contract must clearly express the maximum amount to be paid and the basis on which payment is to be made: e.g., a fixed amount regardless of time spent, billing based on time spent at a specified rate plus actual expenses, or cost recovery.)

- Scope (The work, service, or product to be performed, rendered, or provided. Clear and concise language must be used to describe the scope.)
- Other general or unique terms and conditions of the agreement
- Signature by a person for each party who is authorized to bind that party"

SCM, Chapter 3, Additional Requirements for Specific Types of Contracts, Section 3.03, Interagency Agreements, C.4. states: "DGS approval is required for I/As of \$50,000.00 and over unless the agency has higher delegated authority. Once cumulative amendments to the I/A equal or exceed \$50,000.00 or the agency's delegated authority, the I/A must be submitted to DGS/OLS for approval (GC & 11256)."

Recommendation:

The TS should enter into a contract or an interagency agreement with the OCIO clearly stating the telecommunications services, maintenance, and microwave usage the OCIO must provide the CHP to ensure the safety of all departmental employees, especially those on patrol.

FINDING 3:

The TS did not conduct an annual inventory of all its equipment.

Condition:

The CHP owns equipment statewide. Some of this equipment is telecommunications equipment, which is the responsibility of the TS as the Office of Primary Interest. A number of the telecommunications equipment is located at sites safeguarded by the OCIO. Many of these sites have not been completely inventoried by the TS since 2006.

Criteria:

SAM Code Section 8652 states: "Departments will make a physical count of all property and reconcile the count with accounting records at least once every three years. Inventory counting does not need to be performed at one time for an entire department's property. Departments may take a rotating inventory according to an inventory calendar."

Highway Patrol Manual (HPM) 11.2, Materials Management Manual, Chapter 8, Equipment, paragraph 14.a. states: "a. <u>Annual Physical Inventory</u>. To ensure the accuracy of the departmental PR [Property Records], each commander will be responsible for conducting an annual physical inventory of equipment and vehicles assigned to their command."

HPM 11.2, Material Management Manual, Chapter 8, Equipment, paragraph 14.d.(2) states, "(2) Every effort must be made by the employee conducting the inventory to physically view each item listed. Exceptions are only allowed for items being serviced or repaired, in which case the commander or designated employee should contact the place of service or repair and confirm the item's location/status. Documentation must be kept in the command's file explaining where the item is located."

HPM 11.2, Materials Management Manual, Chapter 8, Equipment, paragraph 14.e.(1) states: "(1) Commanders must prepare a memorandum

to their Division (or appropriate Assistant Commissioner or Commissioner) certifying all items were inventoried. (The

Commissioner's Office will prepare their memorandum and forward their

package directly to ASD.)"

Recommendation:

The TS should comply with state and CHP inventory policies by conducting a complete inventory of all equipment assigned to TS,

especially those located at the OCIO sites.

Conclusion

Based on the review of the California Highway Patrol (CHP) administrative controls of the Administration of Information Technology, this audit revealed the CHP has adequate internal controls in place to safeguard state assets. However, some issues were observed. This report presents suggestions for management to improve on some operations. In doing so, internal controls will be strengthened and the CHP would operate in accordance with the State Contracting Manual, State Administrative Manual, and departmental policies and procedures.

ANNEX A

Memorandum

Date:

September 16, 2010

To:

Office of Inspector General

From:

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

Information Management Division

File No.:

040.11709.A14496.040.Auditresponse

Subject:

RESPONSE TO DRAFT 2009 ADMINISTRATION OF INFORMATION

TECHNOLOGY AUDIT

Information Management Division (IMD) has reviewed the findings mentioned in the memorandum from Office of Inspector General dated August 16, 2010, titles Draft 2009 Administration of Information Technology Audit. Listed in the memorandum were three identified issues. Below is IMD's response to those three findings.

Finding 1 – Information Management Division did not submit the California Highway Patrols (CHP) 2009 Disaster Recovery Plan (DRP) in a timely manner to the Office of Information Security (OIS).

Information Management Division agrees with this finding. In 2009, IMD sent copies of the DRP to Business Transportation and Housing Agency, Department of Finance, and Office of Technology Services (formally called Department of Technology Services) on April 7, 2009. At that time, IMD did not realize a copy needed to go to OIS. On August 17, 2009, IMD sent a copy of the DRP to OIS upon notification of the error.

For the 2010, submission of the DRP, IMD hand carried a copy to OIS on April 12, 2010, and was in compliance with State Administrative Manual Section 5355.2. No further action is required on behalf of IMD for this finding.

Finding 2 - Telecommunications Section (TS) did not enter into an executed contract or interagency agreement with the Office of the Chief State Information Officer (OCIO) clearly stating the telecommunication services, maintenance, and microwave usage the OCIO must provide the CHP to ensure the safety of all departmental employees, especially those on patrol.

Telecommunications Section concurs with this finding. However, per Section 4530 of the State Administrative Manual, public safety agencies are required to utilize services and contracts provided by the OCIO to obtain all forms of public safety communications, including voice, video, radio, and data services. Government Code Sections 14600 and 14931 also mandate the centralization of the State's business management functions, which includes the use of the OCIO

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in the telecommunications area. Because the OCIO's services are compulsory for state agencies, contracts and interagency agreements were neither requested, nor required by the OCIO. Additionally, TS contacted Ms. Loretta Fine, who is the Assistant Deputy Director of the OCIO's Public Safety Communications Division (PSCD), and she confirmed this information. Telecommunications Section believes as indicated in the audit report that contracts or interagency agreements would assist in reconciling all services provided by the OCIO-PSCD. This option will be explored in the near future.

Finding 3 - Telecommunications Section did not conduct an annual inventory of all its equipment.

Telecommunications Section agrees with this finding. This finding refers to the telecommunications equipment located in the remote mountain sites statewide. Our Telecommunications Facility Technicians (TFT) routinely visit 84 of these sites while conducting generator runs and have been conducting equipment inventories per Standard Operating Procedures. However, there are limitations in accessing the other 135 remote radio sites where TS property is located; that is, these sites are not owned and/or managed by the Department, and occasionally travel restrictions are imposed during hard economic times. To mitigate these limitations, TS will work with the OCIO PSCD to have their Radio Technicians assist the Department in conducting inventories at remote radio sites not maintained by our TFTs.

Information Management Division is requesting no further reporting be required for Finding 1 and Finding 2, and agrees with the recommendation from TS to request the assistance of OCIO PSCD in conducting inventory review at the remote sites not maintained by our Department.

Please contact Assistant Chief Troy Abney, at (916) 843-4000, if you have any questions.

R. J. CHAPPELLE, Chief Hox

ANNEX

B

Auditor's Comment

To provide clarity and perspective, the number in the margin below corresponds to the number placed in the response by the Information Management Division (IMD).

In the response provided to the draft audit report, the Information Management Division states, "This finding refers to the telecommunications equipment located in the remote mountain sites statewide." However, this audit finding addresses telecommunications equipment owned by the California Highway Patrol (CHP), but in the possession of the Office of the State Chief Information Officer. In accordance with the State Administration Manual, the CHP is required to conduct a physical count of all property and reconcile the count with accounting records at least once every three years. Additionally, internal policy within Highway Patrol Manual 11.2 requires commanders to conduct an annual physical inventory of equipment. Since equipment has been entrusted to the Telecommunications Section, the Telecommunications Section commander should conduct an annual physical inventory of all equipment assigned to the command. If financial and logistical limitations exist that prevent an annual physical inventory, the inventory must be performed at least once every three years, but noted on the annual inventory memorandum.

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